

## REMARKS

Claims 1-71 are currently pending in this application. The Examiner indicated 49-70 are currently in condition for allowance. The applicants respectfully thank the Examiner for the indication of allowable subject matter.

In a September 22, 2004 Office Action, the Examiner objected to claims 21-23, 44-46, 49, and 66-68 for various informalities. In particular, the Examiner objected to claims 21-23, 44-46, and 66-68 because the recitation of "parallel a major axis" should read -- parallel to a major (minor) axis --. The Examiner objected to claim 49 because it ended in a semi-colon instead of a period. Because correction of the above informalities are obvious typographical, non-narrowing corrections unrelated to patentability, the applicants have elected to amended the claims as requested by the Examiner. Thus, the applicants respectfully request the Examiner withdraw the objection to claims 21-23, 44-46, 49, and 66-68.

The Examiner also objected to the abstract because the first clause of the abstract recited "The present invention provides . . .," which clause can be inferred by the application itself. Because this is a formalistic and non-substantive change the Examiner requests, the applicants have amended the abstract to delete the clause as requested by the Examiner. The applicants respectfully request the Examiner withdraw the objection to the abstract.

The Examiner rejected claims 1-4, 6 and 17 in the September 22, 2004 Office Action under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 6,008,762 ("Nghiem"). The applicants respectfully traverse the rejection. In particular, claim 1 recites a combination of elements including, for example, "the radiating element comprises at least one non radiating edge and at least one radiating edge; the shorting element residing on a non radiating edge of the radiating element and extending from the radiating element to the ground plane," which is not disclosed or suggested by Nghiem. Rather, Nghiem at most discloses a shorting tab extending from

the radiating edge to the non radiating edge. Thus, for at least this reason, claim 1 is patentably distinct from Nghiem.

Further, claim 1 also recites a combination of elements including for example, “the radiating element comprises at least one non radiating edge and at least one radiating edge; . . . a feed tab, and the feed tab residing on the non radiating edge of the radiating element and extending from the radiating element towards the ground plane,” which is not disclosed or suggested by Nghiem. While Nghiem discloses a feed probe 324, it is not clear whether the feed probe couples to the radiating element on an edge or to a non-edge portion of first arm 308. Because Nghiem does not disclose where feed probe 324 couples to first arm 308, claim 1 is patentably distinct from Nghiem.

Claims 2-4, 6, and 17 depend from claim 1 and, at least by virtue of the dependency, are also patentably distinct from Nghiem.

The Examiner rejected claim 71 under 35 U.S.C. § 102(b) as being anticipated by United States Patent Number 6,166,694 (“Ying”). The applicants respectfully traverse the rejection. In particular, amended claim 71 recites a combination of elements including, for example, “means coupled to the non radiating edge for supplying power to the means for radiating; means coupled to the non radiating edge for shorting the means for radiating to the ground plane,” which is not disclosed or suggested by Ying. Similar to Nghiem, Ying discloses a shorting post and feeding post that extend from one edge of the radiating element to the other, see for example Ying figure 4. Because Ying does not disclose feed and/or short coupled to the non radiating edge of the radiating element, claim 71 is patentably distinct from Ying.

The Examiner rejected claims 1, 10-14, 18-20, 22, 24, 25, 27, 28, 30-32, 37-39, 40, 42, 43, 45, 47, and 48 under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 6,693,594 (“Pankinaho et al.”). The applicants respectfully tranverse the rejection. In particular, Pankinaho et al. relates specifically to a planar inverted F antenna where as the claims of the present invention all relate to loop antennas. A planar inverted F antenna operates and functions in a very different manner than a loop

antenna. For example, the planar inverted F antenna comprises a planar radiating element with a gap formed in the plane. The gap quasi partitions the radiating planar element into multiple operating frequencies. The loop antenna, unlike the planar inverted F antenna, comprises conductive strips formed into shapes. In fact, claim 1 specifically recites “a loop antenna,” which cannot be disclosed or suggested by Pankinaho et al. because Pankinaho et al. discloses a planar inverted F antenna and not a loop antenna. For at least this reason, claim 1 is patentably distinct from Pankinaho et al.

Claim 27 contains limitations similar to claim 1 and, at least by virtue of the similarity, is patentably distinct from Pankinaho et al. Claims 10-14, 18-20, 22, 24, 25, 28, 30-32, 37-39, 40, 42, 43, 45, 47, and 48 depend for either claim 1 or claim 27 and, at least by virtue of the dependency, are patentably distinct from Pankinaho et al.

Looking specifically to claim 10, the Examiner rejected claim 10 as being anticipated by Pankinaho et al. The applicants respectfully traverse this rejection and suggest the Examiner is reading more into Pankinaho et al. than it actually discloses. Claim 10 recites “a first conductive strip . . . [and] at least one second conductive strip,” which is not disclosed or suggested by Pankinaho et al. Thus, claim 10 recites two distinct conductive strips that form parts of a radiating element. Pankinaho et al., however, discloses a single planar element quasi partitioned by a gap into a single radiating element that operates at two distinct frequencies. Thus, for at least this additional reason, claim 10 is patentably distinct from Pankinaho et al. Claims 11-14, and 18 depend from claim 10 and, at least by virtue of the dependency, are patentably distinct from Pankinaho et al.

Similar to claim 10, claim 27 recites a combination of elements including, for example, “a first radiating element comprising a first conductive strip . . . [and] a second radiating element comprising a second conductive strip,” which is not disclosed or suggested by Pankinaho et al. Rather, Pankinaho et al. discloses a single conductive planar element quasi partitioned by a gap into multiple operating frequencies. Thus, claim 27 is patentably distinct from Pankinaho et al. Moreover, claims 28, 30-32, 37-


39, 40, 42, 43, 45, 47, and 48 depend from claim 27 and, at least by virtue of this dependency, are patentably distinct from Pankinaho et al.

Finally, the Examiner rejected claims 5, 7-9, 15, 16, 21, 23, 26, 29, 32, 33-36, 41, 44, and 46 under 35 U.S.C. § 103(a) as being unpatentable and obvious over Pankinaho et al. taken alone. However, each of the claims recited above depends from claim 1 or 27 and for all the reasons cited above the claims are patentably distinct from Pankinaho et al.

For all the forgoing reasons, it is respectfully submitted that claims 1-71 as amended are currently in condition for allowance. Thus, withdrawal of the rejections and allowance of the pending claims is specifically requested.

No fee is believed due for entry of this paper. If an extension of time under 35 C.F.R. § 1.136 is required to obtain entry of this Amendment, such an extension is requested. If there are fees due under 37 U.S.C. §§ 1.16 or 1.17 which are not otherwise accounted for, please charge our Deposit Account No. 08-2623.

Respectfully submitted this 8th day of December , 2004.

A handwritten signature in black ink, appearing to read 'B. Kinnear', is written over a horizontal line.

Brian Kinnear, Reg. No. 43,717  
Attorney for Applicant  
HOLLAND & HART LLP  
555-17th Street, Suite 3200  
P.O. Box 8749  
Denver, Colorado 80201  
(303) 295-8170

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